



**City of Albuquerque
Environmental Health Department
Air Quality Division**

**Sand and Gravel/Aggregate Processes and Operations
Policy
(Effective November 20, 1998)**

Permitting

This document is to serve as the policy for permitting equipment associated with sand and gravel/aggregate processes and operations, whether or not subject to NSPS Subpart OOO. Processing equipment and operations include crushing, screening (sizing of material), material handling, and storage piles. These types of processes are significant sources for particulate matter (TSP and PM₁₀) in New Mexico due to the arid climate. Emission sources associated with these operations and processes are categorized as either process sources or fugitive sources. Process sources are those which are responsive to capture or control, while fugitive sources are those which rely on the settling of the dust and can be difficult to control. Particulate emissions are affected by the size of gravel and surface moisture content, process throughput rate, equipment type, operations, and climate.

Due to the arid climate and the low moisture content of the material in the Albuquerque/County of Bernalillo region, the Division has adopted specific emission factors for equipment and operations which best represents this area.

The following emission factors for filterable PM (TSP) and PM₁₀ emissions were obtained from the background information (May 11, 1994) of the revised AP-42 Section 11.19.2, Crushed Stone Processing and should be applied for a 20 NMAC 11.41 applicability determination. Applicability for 20 NMAC 11.40 or 20 NMAC 11.41 shall be determined on the potential to emit (PTE). PTE is defined in 20 NMAC 11.01.7.61 as the following:

7.61 POTENTIAL TO EMIT OR PRE-CONTROLLED EMISSION RATE: *means the maximum capacity of a stationary source to emit any air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation is federally enforceable or is included in a permit issued by the Department. However, the potential to emit for nitrogen dioxide shall be based on total oxides of nitrogen. [11-12-81, 8-1-96]*

<u>Process</u>	<u>Filterable PM (TSP) Emission Factor (lb/ton)</u>	<u>PM₁₀ Emission Factor (lb/ton)</u>	<u>Reference AP-42 Table</u>
Primary Crushing	0.074	0.0352 ¹	11.19.2-2 ² (1195)
Secondary Crushing	0.059	0.0281 ¹	11.19.2-2 ² (1195)
Screening	0.190	0.091 ¹	11.19.2-2 ² (1195)
Transfer Points	0.0031	0.0015 ¹	11.19.2-2 ² (1/95)
Batch/Bulk Unloading	0.056	0.027 ¹	8.19.1-1 (9185)
Aggregate Handling and Storage Piles	0.019	0.009 ¹	13.2.4 (1195)
Unpaved Roads			13.2-2

¹ PM₁₀ emission factor was derived by dividing the TSP by 2.1 per footnote c of Table 11.19.2-2 (1195).

² Emission factors were taken from Table 3; May 11, 1994 of the revised AP-42 Section 11.19.2, Crushed Stone Processing.

Enforcement/Compliance

Once an authority-to-construct permit has been issued, performance tests (20 NMAC 11.90.11.2.6) may be required by the Division to demonstrate compliance of the unit opacity limitations stated in the permit. These performance tests must be conducted at 90% of the unit's rated capacity or process rate and must be performed in accordance to 20 NMAC 11.41.11.10 stated below:

PERFORMANCE TESTING FOLLOWING STARTUP: *Within sixty (60) days after achieving the maximum production rate in which the newly constructed or modified stationary source will be operated, but not later than one hundred eighty (180) days after initial startup of the newly constructed or modified source the owner or operator of the source may be required to conduct a performance test in accordance with methods and under operating conditions approved by the Department and to furnish the Department with a written report of the results of the test. The permittee shall allow a representative of the Department to be present at the test. The performance tests may have to be repeated until such time that compliance is demonstrated and testing is performed in a technically satisfactory manner. [3-24-82...7-21-87]*

The Division has developed a policy for performance testing of sand and gravel operations. Refer to the table below for source testing requirements. The Division may require performance tests in addition to the testing requirements stated below to determine that the unit is in compliance of the specified emission rates stated in the permit. Performance tests include, but are not limited to Method 9 as described in 40 CFR 60, Appendix A.

Permitted Plant Process Rate	Facility Type	Initial Method 9 Performance Test	Annual Method 9 Performance Test
150-500 tpy	NSR	Yes	Discretion of Division
>500	NSR	Yes	Discretion of Division
150-500 tpy	Title V	Yes	Yes
>500	Title V	Yes	Yes

Portable Units and Relocation

Currently, 20 NMAC 11.41 does not contain language addressing portable units and relocation of portable units. Portable units include, but are not limited to, sand/gravel, rock crushing/screening, concrete batch plants, and asphalt batch plants. This policy will serve as guidance to address portable units and relocation of such units until 20 NMAC 11.41 can be updated to contain such language.

Any portable unit, as defined above, must submit a relocation notice at least 30 days prior to relocation. If deemed necessary by the Division, an ambient air quality analysis demonstrating compliance with National Ambient Air Quality Standards and New Mexico Ambient Air Quality Standards shall be submitted by the permittee, and a 30-day public comment period may be required prior to approval of the relocation. The portable unit shall not commence operations until the COA/EHD/AQD has officially approved the new location. Approval by the COA/EHD/AQD may be made by fax or mail to the operator. Approval of the relocation shall be based, but not limited to, on the proposed property location, proximity to residences, offices, or schools within 1/4 mile of the proposed facility boundaries. The relocation notice must be submitted on a form provided by the COA/EHD/AQD.

Revised December 9, 1999